#### § 154.1130

and at least one isolation valve downstream of each branch connection to isolate damaged sections.

- (c) Each valved cross-connection from the water spray system to the fire main must be outside of the cargo area.
- (d) Each pipe, fitting, and valve for the water spray system must be made of fire resistant and corrosion resistant materials, such as galvanized steel or galvanized iron pipe.
- (e) Each water spray system must have a means of drainage to prevent corrosion of the system and freezing of accumulated water in subfreezing temperatures.
- (f) Each water spray system must have a dirt strainer that is located at the water spray system manifold or pump.

#### § 154.1130 Sections.

- (a) If a water spray system is divided into sections, each section must at least include the entire deck area bounded by the length of a cargo tank and the full beam of the vessel.
- (b) If a water spray system is divided into sections, the control valves must be at a single manifold that is aft of the cargo area.

## §154.1135 Pumps.

- (a) Water to the water spray system must be supplied by:
- (1) A pump that is only for the use of the system;
  - (2) A fire pump; or
- (3) A pump specially approved by the Commandant (CG-522).
- (b) Operation of a water spray system must not interfere with simultaneous operation of the fire main system at its required capacity. There must be a valved cross-connection between the two systems.
- (c) Except as allowed under paragraph (d) of this section, each pump for each water spray system must have the capacity to simultaneously supply all areas named in §154.1110.
- (d) If the water spray system is divided into sections, the pump under paragraph (a) of this section must have the capacity to simultaneously supply the required discharge density under §154.1115(a) for:
- (1) The areas in §§154.1110(f) through (h) and 154.1115(b); and

(2) The largest section that includes the required protection under §154.1110 (a), (b), and (c).

[CGD 74-289, 44 FR 26009, May 3, 1979, as amended by CGD 82-063b, 48 FR 4782, Feb. 3, 1983]

FIREFIGHTING SYSTEM: DRY CHEMICAL

# §154.1140 Dry chemical system: General.

Each liquefied flammable gas carrier must have a dry chemical firefighting system that meets §§154.1145 through 154.1170, Part 56 and Subpart 162.039 of this chapter.

## §154.1145 Dry chemical supply.

- (a) A vessel with a cargo carrying capacity less that 1000 m³ (35,300 ft.³) must have at least one self-contained dry chemical storage unit for the cargo area with an independent inert gas pressurizing source adjacent to each unit.
- (b) A vessel with a cargo carrying capacity of  $1000~\text{m}^3$  (35,300 ft.³) or more must have at least two self-contained dry chemical storage units for the cargo area with an independent inert gas pressurizing source adjacent to each unit.
- (c) A vessel with bow and stern loading and discharge areas must have at least one self-contained dry chemical storage unit with an independent inert gas pressurizing source adjacent to the unit for each area.
- (d) Each dry chemical storage unit and associated piping must be designed for:
- (1) Sequential discharge of each hose line and each monitor for 45 seconds; and
- (2) Simultaneous discharge of all hose lines and monitors for 45 seconds.
- (e) Each fully charged dry chemical storage unit must have the greater of the following:
- (1) Enough dry chemical to provide for sequential discharge of each attached hose and monitor for 45 seconds.
- (2) Enough dry chemical to provide for simultaneous discharge of all attached hoses and monitors for 45 seconds.